# Aethes margaritifera, a new species for Turkey (Lepidoptera: Tortricidae)

## F. Groenen & H. Özbek

**Samenvatting**. *Aethes margaritifera*, een nieuwe soort voor de Turkije (Lepidopterae: Tortricidae)

Zes exemplaren *Aethes margaritifera* Falkovitch, 1963 werden op licht verzameld te Erzurum. De soort is nieuw voor de Turkse fauna.

**Résumé**. *Aethes margaritifera*, une espèce nouvelle pour la Turquie (Lepidoptera: Tortricidae)

Six exemplaires de *Aethes margaritifera* Falkovitch, 1963 furent capturés à la lumière à Erzurum, Turquie. Cette espèce est nouvelle pour la faune turque.

Key words: Aethes margaritifera - Aethes margaritana - Turkey - faunistics - new record.

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#### Introduction

The material was collected with a light trap on the campus of Atatürk University in 1996. The tortricid moth, *Aethes margaritifera* Falkovitch, 1963 is reported here as new for the Turkish fauna.

The campus is quite a large area at an altitude of 1850–1900 m. The whole area consists of uncultivated lawns and meadows, sparsely wooded with pine (*Pinus sylvestris* L.), beech (*Fagus* sp.), oak (*Quercus* sp.), ash (*Fraxinus* sp.), willow (*Salix* sp.) and several unidentified species of bushes. The roughest climate of Turkey prevails in this area. The winters are cold and the summers are hot and dry. The annual average temperature is 6 °C.



Fig. 1: *Aethes margaritifera* Falkovitch, 1963, Turkey, Erzurum, Atatürk Üniversitesi Campus, 1850–1900m, 25.VII.1996, leg. H. Özbek, coll. F. Groenen (Photograph: Jurate De Prins).

## Aethes margaritifera Falkovitch, 1963

Examined material: 6 specimens: Erzurum, Turkey, 2.VI.1996: 2 ex.; 26.VI.1996: 3 ex.; 25.VII.1996: 1 ex., coll. Özbek, Erzurum, Turkey and Groenen, Luyksgestel, Netherlands.

Aethes margaritifera was described from Sopki Kokschetau in Central Asia in the former USSR. The moth is very similar to A. margaritana (Haworth, 1811). The wing pattern shows some small differences: in A. margaritana the second stripe from the right, is bent at a right angle (Kuznetsov 1989), and the small, oblong, silver spot between the subterminal fascia and the termen is missing in A. margaritifera (see fig. 1 and Razowski 1970: 313, pl. 18, fig. 194).

As the wing pattern of *A. margaritana* is variable, examination of the genitalia, that show significant differences, is desirable. In the male genitalia of *A. margaritana* the sacculus has a process which is absent in *A. margaritifera*. The aedeagus of *A. margaritifera* has one short cornutus with a large base, whereas in *A. margaritana* the cornutus is long (see fig. 2 and Razowski 1970: 313, pl. 82, fig. 194). In the female genitalia of *A. margaritifera* the dorsal side of the antrum is well sclerotized and has two lobes. In *A. margaritana* the antrum is concave and the lobes are absent.



Fig. 2: Aethes margaritifera Falkovitch, 1963, male genitalia [FG0552], Turkey, Erzurum, Atatürk Üniversitesi Campus, 1850–1900m, 25.VII.1996, leg. H. Özbek, coll. F. Groenen (Photograph: Jurate De Prins).

## **Biology**

The moth flies in June and July. Razowski (1970: 314) supposes that there are two generations per year, because some specimens were observed in March and July. The hostplant of the larva is unknown.

## Distribution

A. margaritifera is known from Central Asia (District Celinograd), Armenia (Yerevan), South Russia (Uralsk, Krasnoarmiejsk) and new from Anatolia, Turkey. Razowski (1970: 314) also mentions "Orenburg" as a locality.

## Discussion

Aethes margaritifera is probably distributed in the east and southeast of the Palaearctic region. Because of the external similarity with A. margarotana, it is quite possible that specimens originating from the east are overlooked in collections. It is necessary to examine the genitalia to be sure of a reliable identification.

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## Literature

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